UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,977	03/06/2000	MARK HANS EMANUEL		6804

7590 05/14/2003

JOEL R. PETROW
SMITH & NEPHEW, INC.
1450 BROOKS ROAD
MEMPHIS, TN 38116

EXAMINER	
BUI, VY Q	

ART UNIT	PAPER NUMBER
3731	15

DATE MAILED: 05/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/486,977	Applicant(s) EMANUEL, MARK HANS	
	Examiner Vy Q. Bui	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 March 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-38* is/are pending in the application.

4a) Of the above claim(s) *24-37* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *20-23 and 38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *24-37* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of the invention of Group I (claims 20-23) in Paper No. 11 is acknowledged and made final.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over KAGAWA et al (5,163,433).

As to claims 20-21, KAGAWA (Fig. 1) shows an ultrasound cutting device for removal of tissue from a body cavity in a human being (column 1, lines 11-16) including an ultrasonic probe 3/mechanical element which defines a first suction passage/first path 21 for discharging fluid with detached tissue, an outer tube 22b, an inner tube 22a, fluid pump 42 and suction pump 41. Probe 3/mechanical element and inner tube 22a

define fluid supply passage 25, inner tube 22a and outer tube 22b defines fluid passage 26 for discharging substantially only fluid along a second path because the suction mouth of the discharge passage 26 is next to the supply mouth of the supply passage 25 (see Fig. 1). Inherently, to avoid over flow of the body cavity, the fluid supplied from passage 25 and fluid discharged through passages 21 and 26 must be regulated so as to keep a balance between inflow fluid from passage 25 and outflow fluid through passages 25 and 26. Therefore, the pressure in the cavity body should be substantially constant. Similarly, the KAGAWA device inherently discloses a method of discharging fluid with detached tissue through a first path (passage 21) and discharging substantially only fluid along a second path (passage 26).

Alternately, to avoid over flow of fluid from the body cavity, it would have been obvious to one of ordinary skill in the art at the time of the invention to regulate the KAGAWA device a in a method as recited in the claims such that the inflow fluid from passage 25 into the body cavity and the discharge fluid through passages 25, 26 out of the body cavity are maintained substantially the same and such that a pressure in the body cavity is maintained substantially constant as well.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over KAGAWA et al (5,163,433).

As to claims 22 and 23, KAGAWA inherently discloses or alternatively suggests a method as recited in the claims, except for using an insertion mandrel for insertion into the body cavity before inserting the device. It is well known in the art to use a mandrel

or a trocar to create an access passage to a body cavity before inserting a probe or a cutting device into the body cavity via the access passage. For example, BIRTCHER (WO 93/07821; line 27, page 1 to line 19, page 2) discloses such a standard laparoscopic procedure before inserting a probe or a cutting device into a body cavity. It would have been obvious to one of ordinary skill in the art at the time the invention was made to insert a mandrel or trocar into a body cavity to create an acces passage and remove the trocar before inserting a probe or cutting device into the body cavity as this is a conventional laparoscopic procedure.

Response to Amendment

The amendment filed on 3/1/2003 under 37 CFR 1.131 has been considered but is ineffective to overcome the KAWAKA et al reference.

As to claim 20, the applicant asserts that KAWAKA does not disclose **a mechanical element** for cutting and detaching a tissue from a body cavity because KAWAKA using ultrasound energy to fracture tissue (applicant's remarks, line 12-16, page 3). However, probe 3 can well be considered as **a mechanical element** for cutting and detaching a tissue, because the distal tip of the probe 3 is indeed **a mechanical element** which does vibrates at a high frequency (ultrasound) to fracture or cut and detach a tissue from a body cavity. Further more, pumps 41 and 42 do regulate the input flow of a fluid and the discharging flow of the fluid, inherently, so as to avoid overflow of the body cavity and maintain a substantially constant pressure in the body cavity.

As to claim 38, KAWAGA reference does disclose first path 21 and second path 26 separate from first path 21 because they essentially are one same path.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vy Q. Bui whose telephone number is 703-306-3420. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Milano can be reached on 703-308-2496. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-2708 for regular communications and 703-308-2708 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0858.

MICHAEL J. MILANO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

VQB VB

May 12, 2003.